INDEX OF SUBJECTS

PAGE

ADJUVANT effect of tubercle bacillary lipid on antibody response of rabbits to sheep erythrocytes if given at same time as or 4 hr before antigen; no effect if given 12 hr before; diminishes response if given 36 or 48 hr before . 59

AFLATOXIN B_1, doses of that significantly increase clotting time in rats, goats and ducks have no effect on plasma clearance of indocyanine green through liver 85

AMELOBLASTOMA, simple, ultrastructure of 173

ANEURYSMS, dissecting, of arteries other than aorta 219

micro-aneurysms of cerebral arteries not associated with greater increase in medial thickness in these arteries than in arteries without them in hypertensive patients 129

ANOMALIES, CONGENITAL, tracheal obstruction with oesophageal atresia . . 261

ANTIBODY RESPONSE of rabbits given an injection of tubercle bacillary lipid at various times before antigen (sheep red cells) probably dependent on phagocytic activity of normal and hyperplastic reticulo-endothelial cells induced by adjuvant 59

ANTICOAGULANT EFFECT of aflatoxin B_1 probably not due to generalised hepatotoxic effect, since aflatoxin B_1 does not affect plasma clearance of indocyanine green; possibly due to specific inhibition of prothrombin synthesis by competition for the apo-enzyme . . 85

AORTA, developing, RNA concentration diminishes with slight slowing, DNA concentration falls rapidly at first up to about 25 weeks' gestation, then much more slowly (with close relation to fall in aortic cellularity); collagen concentration maximal at about time of birth, elastin concentration increasing for 3 mth after birth . . 265

ARTERIES, cerebral, medial thickening in hypertensive patients much same whether micro-aneurysms present or not 129

cerebral and renal, histometric study in normotensives and chronic hypertensives; no increase in medial thickness from age alone 129

PAGE

ARTERIES, other than aorta, factors important in pathogenesis of dissecting aneurysms of 219

small in chick embryo, development of connective-tissue components in . 281

techniques for mensuration of, critical survey; and simple reliable new method 119

ARTHRITIS, experimental adjuvant induced, reduction of adult capacity to develop if rats given LNPF, extract of cotton-pellet granuloma or pertussis vaccine neonatally 335

ASPIRIN inhibits permeability-increasing effect of bradykinin in vascular permeability tests 1

ATROPHY of pineal gland does not occur in adult life; no pattern of fibrosis or gliosis, but fibrosis increases more progressively in females than in males, gliosis much greater in males than in females of 30–60-yr group . . 137

BACTERIAL SPECIES, *Bordetella pertussis* granuloma due to little affected by neonatal or adult thymectomy . . 15

Mycobacterium tuberculosis BCG, granuloma due to little affected by neonatal or adult thymectomy . . 15

BLADDER epithelium of mouse, recovery after injury by 4-ethylsulphonylnaphthalene-1-sulphonamide . . . 151

BRADYKININ vascular-permeability-increasing effect inhibited by aspirin, phenylbutazone, triprolidine and procaine hydrochloride; slightly inhibited by chlorpromazine; effective probably in secondary (delayed) phase of inflammation 1

BURNS, cold water treatment of, effective even up to 45 min. after injury, reduces mortality, reduces necrosis; repair more rapidly established . . . 145

CALCIFICATION present in most pineal glands; small amounts as fine irregular granules, larger as brain sand, may be extensive 137

CARBON clearance rates from rabbit circulation not affected up to 1 hr by injection of tubercle bacillary lipid; from 1 to 12 hr (maximum at 4 hr)

PAGE

markedly increased; reduced but equal, and greater than in controls from 12 to 72 hr; related to phagocytic activity and hyperplasia of reticulo-endothelial cells 59
colloidal, enhancement of attachment to macrophages and platelets if injected 4 hr after stimulation by tubercle bacillary lipid probably cause of more rapid removal from blood, in which carbon aggregates often present . . . 97
tetrachloride significantly reduces plasma clearance of indocyanine green in rats, goats and ducks 85
CATGUT implants in rat liver, slower resorption of and of collagen produced in response to in rats on protein-deficient diet 191
CELLS, oral epithelial, highest fibrinolytic activity in younger desquamated cells 293
CENTRONUCLEAR MYOPATHY in 67-yr-old woman: two muscle-cell populations (1) large, indeterminate or type-2 fibres, few with central nuclei, and (2) small, imperfectly differentiated type-1 fibres, most with central nuclei; no myotubes; probably due to impaired maturation of muscle fibres with subsequent degeneration . . . 237
CERVIX, uterine, carcinoma of or of endometrium probably always present when carcinoma develops in endometrial polyp; tumours not related, probably due to common stimulus . 47
CHICK-EMBRYO aorta, developing, ultrastructural study of ruthenium red-stained material 275
development of connective-tissue components in small arteries of . . 281
CHLORPROMAZINE marked inhibitor of 48/80, moderate inhibitor of polymyxin B, mild inhibitor of globulin PF and histamine; no effect on bradykinin or kallikrein; in vascular permeability tests 1
CHOLANGIOFIBROSIS in DL-ethionine poisoning in rats: metaplasia of bile ducts, with production of mucin similar to that of common bile duct, but not normally produced by intrahepatic bile ducts; this mucoid metaplasia may be related to occasional late development of carcinoma . . 73
CHOLECYSTITIS, chronic, and cholelithiasis, gall-bladder epithelium in: constant change is increase in mucus-secreting activity, less constantly flattening of columnar epithelium, loss of surface microvilli, excess of "pencil" cells, focal intestinal metaplasia and hypertrophy of Golgi apparatus . . 157

PAGE

CILIA, ciliated cells in a simple ameloblastoma 173
COLLAGEN concentration in developing aorta reaches maximum at birth or thereabouts 265
and elastin appear in vessels of developing chick embryo at 14 days . . 281
fibres and oxytalan fibres in zone of subepithelial hyalinisation in a simple ameloblastoma 173
formation (in response to sponge implant in skin) and absorption (of catgut implanted in liver) both delayed in rats on protein-deficient diet . . . 191
COMPOUND 48/80 histamine-liberator, vascular-permeability-increasing effect apparently potentiated by aspirin, inhibited by phenylbutazone, triprolidine, procaine hydrochloride and chlorpromazine 1
CORONARY HEART DISEASE, no association with severity of pulmonary pneumoconiosis 249
CORONARY THROMBOSIS deaths, from, but not from other coronary disease, significantly diminished with increasing respiratory disability from pneumoconiosis; cigarette smoking associated with increase in deaths in all age-groups up to 69 yr 249
COTTON-PELLET granuloma greatly reduced by neonatal or adult thymectomy . 15
granuloma, treatment of neonatal rats with extracts of reduces capacity of adults to produce 335
COUNCILMAN BODIES, constantly present in all of seven basal-cell carcinomas of skin, many ingested by intact carcinoma cells and digested by lysosomal enzymes. 55
COW, ameloblastic odontome of mandible of 169
CYSTS in about one-quarter of pineal glands, mostly in areas of gliosis, sometimes lined by ependymal or parenchymal cells, males and females affected equally; occur in all age-groups . 137
cystic degenerative changes in bladder epithelium of mice given oral 4-ethylsulphonylnaphthalene-1-sulphonamide, with accelerated cell loss and reduction in height of epithelium . 151

DEDIFFERENTIATION of mouse bladder epithelium with loss of special organelles and destruction of mitochondria after oral treatment with 4-ethylsulphonylnaphthalene-1-sulphonamide rapidly restored after cessation . 151

PAGE

DEFIBRINATION, local, in liver and spleen sinusoids of rabbits given tubercle bacillary lipid 4 hr before injection of carbon, but no evidence fibrin involved in fixation of carbon to macrophages or platelets 329
DEFORMITY of third molar teeth of CBA mice may be produced by methotrexate treatment during tooth development 35
DEGENERATION, medial, of arteries other than aorta, important in pathogenesis of dissecting aneurysms . . . 219
of muscle fibres in centronuclear myopathy subsequent to impaired maturation 237
DESQUAMATION of oral epithelial cells, possible importance of fibrinolytic activity in; reduced by smoking . 293
DIMETHYLNITROSAMINE, renal epithelial dysplasia and neoplasia induced in rats by 187
renal mesenchymal tumours induced in rats by 181
DNA concentration in developing aorta falls rapidly from 10th to 25th wk of gestation, then more slowly; DNA per cell maximal at about 25 weeks' gestation 265
DUCKS given doses of aflatoxin B_1 that significantly increase clotting time do not show reduction of plasma clearance of indocyanine green through liver 85
DYSPLASIA of renal tubular cells produced in rats by dimethylnitrosamine . . 187
of thymus after neonatal treatment of rats with LNPF, extract of cotton-pellet granuloma or pertussis vaccine, associated with reduction of adult capacity to form cotton-pellet granulomas, but not to mounting of acute inflammation 335

ELASTIN and collagen appear in vessels of developing chick embryo at 14 days . 281
concentration in developing aorta rises steadily during gestation and for 3 mth after birth 265
ELECTRON-MICROSCOPE STUDY of case of centronuclear myopathy in 67-yr-old woman: evidence of myofibrillar degeneration 237
of changes in proximal convoluted tubules of rat kidney during fluorocitrate poisoning 303
of clearance of colloidal carbon from blood of rabbits, and its enhancement by tubercle bacillary lipid . . 97

PAGE

ELECTRON-MICROSCOPE STUDY of defibrination during carbon clearance in rabbits stimulated with tubercle bacillary lipid 329
of developing chick-embryo aorta; demonstration of glycosaminoglycans with ruthenium red 275
of digestion of cellular fragments within phagolysosomes in carcinoma cells . 55
of formation of cytoplasmic lamellar inclusion bodies in murine pulmonary tumours induced *in vitro* by 20-methylcholanthrene 211
of gall-bladder epithelium in cholelithiasis and chronic cholecystitis . . 157
of injury of mouse bladder epithelium by 4-ethylsulphonylnaphthalene-1-sulphonamide 151
of iprindole-induced pulmonary histiocytosis in rats 150
of lipid pneumonia in the Hawaiian feral mongoose shows alveolar and histiocytic lipid includes intact and fragmented lipid inclusions from granular pneumocytes; fragmented lipid inclusions and lipid crystals also in hyperplastic granular pneumocytes . 205
of renal mesenchymal tumours induced in rats by dimethylnitrosamine . 181, 187
of a simple ameloblastoma . . . 173
EMBRYOLOGY, origin of associated tracheal obstruction and oesophageal atresia 261
ENDOMETRIUM carcinoma of or of cervix probably always present when carcinoma develops in endometrial polyp; tumours not related, probably due to same stimulus. 47
ENZYMES acid phosphatase and β-glucuronidase activity of histiocytes in iprindole-induced pulmonary histiocytosis suggests these cells are macrophages . 105
EPITHELIUM of mouse bladder, recovery after injury by 4-ethylsulphonylnaphthalene-1-sulphonamide 151
ERYTHROCYTES, sheep, effect of tubercle bacillary lipid on antibody response of rabbits to 59
DL-ETHIONINE effect on rat liver; interlobular bile-duct proliferation from ductular cells, with metabolically poor organisation, cellular disorder and possibly neoplasia; cholangiofibrosis present; histochemistry readily allows distinction between ductular cells, interlobular bile-duct epithelium and liver parenchymal cells . . . 73
4-ETHYLSULPHONYLNAPHTHALENE-1-SULPHONAMIDE, recovery of mouse bladder epithelium after injury by . . 151

PAGE

FIBRINOLYSIS, relation of fibrinolytic activity of oral epithelial cells to cellular maturation; relation to smoking; relation of fibrinolytic activity to desquamation . 293
FIBROMA of ovary associated with multiple cutaneous meningiomas in 3-yr-old Nigerian girl 165
FLUOROCITRATE poisoning, changes in proximal convoluted tubule of rat kidney in 303

GLOBULIN PF vascular-permeability-increasing effect apparently potentiated by aspirin, inhibited mildly by phenylbutazone, triprolidine, procaine hydrochloride and chlorpromazine . . 1
GLYCOSAMINOGLYCANS and reticulin present in chick-embryo vessels before distinction into arteries and veins possible . 281
in developing chick-embryo aorta, ruthenium red-assisted ultrastructural study 275
GOATS given doses of aflatoxin B_1 that significantly increase clotting time do not show reduction of plasma clearance of indocyanine green through liver 85
GRANULOMATA due to *Bordetella pertussis* or BCG, neonatal or adult thymectomy has little effect on, greatly reduces those due to cotton-pellet implantation 15

HISTAMINE permeability-increasing-effect inhibited by phenylbutazone in large doses, triprolidine, and slightly by chlorpromazine; apparently potentiated by aspirin 1
HISTIOCYTES in iprindole-induced pulmonary histiocytosis in rats probably macrophages 105
in iprindole-induced pulmonary histiocytosis, probable origin from interstitial pulmonary cells . . . 115
HISTIOCYTOSIS, pulmonary, resembling desquamative interstitial pneumonia, in rats given oral iprindole . . 105
HISTOGENESIS, possible histogenetic relationship of multiple cutaneous meningiomas and ovarian fibroma in 3-yr-old Nigerian girl 165
HYPERCALCAEMIA may be severe after renal transplantation of hyperparathyroidism not treated before . . . 23
HYPERPARATHYROIDISM, tertiary, two cases after renal transplantation and one while awaiting it; distinct adenoma in one case only 23
HYPERPLASIA not associated with early lipid retention in lipid pneumonia in the feral Hawaiian mongoose, but fully developed lesion accompanied by hyperplasia of granular pneumocytes, membranous pneumocytes and cells intermediate between latter and bronchial basal cells 205
HYPERTENSION, chronic systemic, associated with medial hypertrophy in cerebral and renal arteries of all sizes tested; no increase beyond this in cases with cerebral micro-aneurysms . . 129
in experimental nephrosclerosis in rabbits is at first associated with renal renin concentration, but may persist when this has fallen to subnormal levels . 319
important in pathogenesis of dissecting aneurysms of arteries other than aorta 219

INCLUSION BODIES, cytoplasmic lamellar, in mouse lung adenomas and adenocarcinomas induced *in vitro* with 20-methylcholanthrene, similar to those in type-II alveolar cells; derived directly from multivesicular bodies or indirectly from dense bodies derived from them; finally secreted from apical surface of tumour cells 211
INDOCYANINE GREEN injected intravenously removed from plasma entirely by liver and not recirculated, so useful for test of liver function 85
INFLAMMATION(S), acute, in adult rats not affected by neonatal treatment with LNPF, extract of cotton-pellet granuloma or pertussis vaccine . 335
acute, unaffected by neonatal or adult thymectomy 15
chronic, unassociated with hypersensitivity unaffected by neonatal or adult thymectomy 15
delay in onset and intensity of cellular proliferation and collagen formation in response to sponge implants in skin and collagen implants in liver in rats on a protein-deficient diet . . 191
susceptible to corticosteroids, some dependent on thymus by mechanism unrelated to its immunological role . 15
INHIBITOR(S) of citric acid cycle (fluorocitrate) changes in proximal convoluted tubules of kidney of rats poisoned with 303
of vascular-permeability factors, value in analysing inflammatory process . 1
INNERVATION of affected muscle relatively normal in case of centronuclear myopathy in 67-yr-old woman . . 237
IPRINDOLE, oral, pulmonary histiocytosis simulating desquamative interstitial pneumonia in rats given . . . 105

PAGE

KALLIKREIN vascular-permeability-increasing effect unaffected by aspirin, inhibited markedly by phenylbutazone, weakly by procaine hydrochloride and not at all by chlorpromazine . . 1
KIDNEY mesenchymal tumours induced in rats by dimethylnitrosamine . . 181
rat, changes in proximal convoluted tubule during fluorocitrate poisoning . . 303
rat, epithelial dysplasia and neoplasia induced in by dimethylnitrosamine . 187
transplantation, two cases of tertiary hyperparathyroidism after, and one while awaiting; distinct adenoma in one only 23

LIPID pneumonia in the Hawaiian feral mongoose 205
tubercle bacillary, adjuvant effect on antibody response of rabbits to sheep erythrocytes if given at same time as or 4 hr before antigen; no adjuvant effect if given 12 hr before antigen; if given 36 or 48 hr before antigen, response less than in controls . . 59
tubercle bacillary, given 4 hr before injection of colloidal carbon enhances attachment of carbon to macrophages and platelets, surface ruffles and degrees of endocytosis by macrophages increased 97
tubercle bacillary, used to increase rate of carbon clearance by injection 4 hr before injection of carbon; associated with deposition of fibrillary material in liver and spleen sinusoids and extravasation of nuclei into circulation 329
LIPOFUSCIN and melanin present in pineal parenchymal cells 137
LIVER function and histology in various animal species given non-lethal doses of aflatoxin B_1 85
rat, comparison of effects of alpha-naphthyl-*iso*-thiocyanate and DL-ethionine on 73
LNPF, neonatal treatment with reduces capacity of adult rats to produce cotton-pellet granuloma . . . 335
LUNG, histiocytosis resembling desquamative interstitial pneumonia in rats given oral iprindole 105
lipid pneumonia in feral Hawaiian mongoose 205
macrophages in iprindole-induced pulmonary histiocytes probably mainly originate from pulmonary interstitial cells 115
LYMPHOCYTES, sensitised, marginal augmentation of types of chronic inflammation in which they play an instructive role 15
LYSOSOMES, lamellar cytoplasmic inclusion bodies in mouse lung adenomas and adenocarcinomas induced *in vitro* with 20-methylcholanthrene derived indirectly from multivesicular bodies or indirectly from dense bodies derived from them, resembling lysosomes . 211

MACROPHAGES, breakdown of bacteria by unaffected by neonatal or adult thymectomy 15
tubercle bacillary lipid given 4 hr before intravenous injection of colloidal carbon enhances attachment of carbon to, and increases number of surface ruffles of and degree of endocytosis by . 97
MATURATION of oral epithelial cells, relation to fibrinolytic activity . . 293
MEDIATORS of acute inflammation unaffected by neonatal or adult thymectomy 15
MELANIN as well as lipofuscin in cytoplasm of parenchymal cells of pineal gland 137
MENINGIOMAS, multiple cutaneous, with ovarian fibroma in 3-yr-old Nigerian girl 165
MENSURATION, arterial, critical survey of existing methods, and new simple reliable one 119
METASTASES, chorionepitheliomatous, from teratoma of testis, in both lungs and spleen, brain, subcarinal lymph-nodes, and retroperitoneal tissue . . 91
METHODS, PATHOLOGICAL, new simple, for mensuration of arteries, and mathematical " idealisation " . . . 119
METHOTREXATE treatment of CBA mice on 3rd, 4th and 5th days *post partum*, followed by folinic acid treatment 8 hr later increases frequency of absence of third molar teeth 35
MITOCHONDRIA, destruction in mouse bladder epithelium after oral treatment with 4-ethylsulphonylnaphthalene-1-sulphonamide . . . 151
MONGOOSE, Hawaiian feral, lipid pneumonia in 205
MOUSE(MICE), CBA, absence of third molar tooth not uncommon, frequency increased by treatment of young with 1 LD100 of methotrexate on 3rd, 4th and 5th day *post partum*, and folinic acid 8 hr later 35
pulmonary adenomas and adenocarcinomas induced *in vitro* with 20-methylcholanthrene, formation of cytoplasmic lamellar inclusion bodies in . 211

PAGE

MOUSE(MICE), CBA, recovery of bladder epithelium after injury by 4-ethylsulphonylnaphthalene-1-sulphonamide . 151
MUSCLE fibres, large type-2 or indeterminate, with fewer central nuclei and small, imperfectly differentiated type-1 fibres, most with central nuclei, in centronuclear myopathy in 67-yr-old woman 237
smooth, in vascular media, mature cytoplasmic staining of in developing chick embryo acquired only after 16 days' incubation 281
MYASTHENIA GRAVIS, in Boxer cross Labrador dog, associated with thymoma . 177
MYOPATHY, centronuclear, in old age . 237

α-NAPHTHYL-*ISO*-THIOCYANATE effects on rat liver; interlobular bile-duct proliferation from ductular cells, without cellular disorder or neoplasia; no cholangiofibrosis; histochemistry readily allows distinction between ductular cells, interlobular bile-duct epithelium and liver parenchymal cells . . 73
NEPHROSCLEROSIS, experimental, produced in rabbits by placing embolic source in aorta, renal renin concentration in rose in acute stage, renin granulation increased in extent later, and then fell to subnormal levels though most of the animals were still hypertensive . . 319
NUCLEI, central, in some large indeterminate or type-2 muscle fibres and in most small imperfectly differentiated type-1 fibres in case of centronuclear myopathy in 67-yr-old woman . . 237
NUCLEIC ACID content of developing aorta 265

ODONTOME, ameloblastic, of mandible of cow 169
OESOPHAGUS, atresia with tracheal obstruction 261
OVARY, fibroma in 3-yr-old Nigerian girl, associated with multiple cutaneous meningiomas 165
OXYPHENBUTAZONE effective as phenylbutazone clinically in reducing inflammation, but poor inhibitor of permeability factors; mild inhibitor of histamine release by polymyxin B and possibly of globulin PF; in vascular permeability tests 1

PERMEABILITY FACTORS, antagonists to . 1
PERTUSSIS VACCINE, treatment of neonatal rats with reduces capacity of adults to produce cotton-pellet granuloma . 335
PHAGOCYTOSIS of cell fragments by epithelial cells of basal-cell carcinomas . 55

PAGE

PHENYLBUTAZONE in low dosage inhibits permeability-increasing effect of 48/80 and polymyxin B, in high dosage inhibits globulin PF, histamine, kallikrein and bradykinin; in vascular permeability tests 1
PHOSPHATASE, acid, in lysosomes in cells of basal-cell cercinoma; probably responsible for digestion of cell fragments in phagolysosomes and so for shrinkage necrosis 55
PINEAL GLAND, histological appearance from puberty to old age . . . 137
PLATELETS, tubercle bacillary lipid given 4 hr before intravenous injection of colloidal carbon enhances attachment of carbon to; aggregates of often in circulation 97
PNEUMOCONIOSIS apparently plays no part in death from coronary heart disease . 249
PNEUMOCYTES, granular and membranous, hyperplasia of in fully developed lesion of lipid pneumonia in feral Hawaiian mongoose 205
PNEUMONIA, desquamative interstitial, pulmonary histiocytosis resembling in rats given oral iprindole 105
lipid, in Hawaiian feral mongoose, associated with distortion of surfactant production, transport and turnover . 205
POLYGENICALLY DETERMINED DEFECT, absence of third molar tooth in CBA mice, frequency increased by environmental agent—inhibition of DNA synthesis by treatment with methotrexate, changes in size and form of third molar also produced 35
POLYMYXIN B, histamine-liberator, vascular-permeability-increasing effect unaffected by aspirin, inhibited by phenylbutazone, triprolidine, procaine hydrochloride and chlorpromazine . 1
POLYPS, endometrial, frequency of carcinoma in low; in six cases examined, second carcinoma in either endometrium or cervix, not necessarily related to that in polyp; but carcinoma in endometrial polyp should cause suspicion of endometrial or cervical carcinoma 47
PREGNANCY important in pathogenesis of dissecting aneurysms of arteries other than aorta 219
PROCAINE HYDROCHLORIDE potent inhibitor of histamine-releasing agents 48/80 and polymyxin B, but not of histamine; moderate inhibitor of bradykinin, mild inhibitor of globulin PF and kallikrein; in vascular permeability tests 1

PAGE

PROLINE hydroxylation reduced in cold-water-treated burns, but only in early stages 145
PROTHROMBIN synthesis, possible specific inhibition by aflatoxin B_1 . . 85

RABBIT(S), effects of tubercle bacillary lipid on antibody response of to sheep erythrocytes probably due to change of rate, not time, of synthesis . . 59
mechanism of clearance of colloidal carbon from blood of . . . 97
New Zealand Red, intra-articular injection of streptolysin-S preparations in produces chronic synovitis, probably due to non-haemolytic component of preparations, which is mitogenic for lymphocytes 199
renal renin in experimental nephrosclerosis in 319
RAT(S) given doses of aflatoxin B_1 that significantly increase clotting time do not show reduction of plasma clearance of indocyanine green through liver 85
given oral iprindole, pulmonary histiocytosis in 105
kidney, changes in proximal convoluted tubule during fluorocitrate poisoning 303
kidney, epithelial dysplasia and neoplasia in due to dimethylnitrosamine . . 187
liver, comparison of effects of alpha-naphthyl-*iso*-thiocyanate and DL-ethionine on 73
on a protein-deficient diet, delay in onset and intensity of inflammatory reaction to sponge implants in skin and catgut implants in liver, and in absorption of implanted and newly formed collagen 191
pulmonary histiocytosis, macrophages in probably derived from pulmonary interstitial cells 115
renal mesenchymal tumours induced by dimethylnitrosamine in 181
treated neonatally with LNPF, extract of cotton-pellet granuloma or pertussis vaccine show thymic hypoplasia or dysplasia in adult, with reduction of capacity to produce cotton-pellet granuloma 335
RENIN, renal, in experimental nephrosclerosis in rabbits 319
REPRODUCTION of mouse bladder epithelium reduced during oral treatment with 4-ethylsulphonylnaphthalene-1-sulphonamide and after cessation of treatment 15
RETICULIN and glycosaminoglycans present in developing chick-embryo vessels before distinction into arteries and veins possible 281

PAGE

REVIEW of 130 cases of dissecting aneurysm of arteries other than aorta and 11 new cases: factors important in pathogenesis 219
RNA concentration in developing aorta, marked but steadily decreasing fall through pregnancy and for 8 mth after birth 265
RUTHENIUM RED, use to reveal ultrastructure of embryo chick developing aorta . 275

SCLEROPROTEIN content of developing aorta 265
SCLEROSIS, systemic, multiple dissecting aneurysms of arteries other than aorta in case with associated hypertension . 219
SHRINKAGE NECROSIS, digestion of cellular fragments within phagolysosomes in carcinoma cells to produce . . 55
SMOKING, cigarette, associated with increase in deaths from coronary thrombosis in age-groups up to 69 yr 249
regular, tends to increase number of immature oral epithelial cells; fibrinolysis still associated mainly with younger desquamated cells, so percentage of fibrinolytic cells unaffected 293
SPONGE implants in skin of protein-deficient rats, delay in onset and intensity of cellular proliferation and collagen formation in response to . 191
STREPTOLYSIN-S preparations contain a haemolytic non-mitogenic component and a non-haemolytic component mitogenic for lymphocytes; latter responsible for chronic synovitis produced by intra-articular injection of streptolysin-S preparations in New Zealand Red rabbits 199
SURFACTANT, lipid pneumonia in feral Hawaiian mongoose associated with distortion of production, transport and turnover of 205
SYNOVITIS, chronic, produced in New Zealand Red rabbits by intra-articular injection of non-haemolytic mitogenic fraction of streptolysin-S preparations 199

TEETH, third molars of CBA mice often absent; if some absent, remaining third molars reduced in size; frequency increased by treatment with methotrexate, followed by folinic acid 8 hr later 35
TERATOMA of testis, microscopic, with chorionepitheliomatous metastases . 91
THYMOMA in Boxer cross Labrador dog with myasthenia gravis 177
THYMUS, neonatal and adult thymectomy have no effect on acute inflammation

PAGE

or its chemical mediators, or on breakdown of bacteria by macrophages or on chronic inflammation unassociated with hypersensitivity, but reduce reaction to cotton pellets, even if incomplete 15
reduction in size in adults or in number of thymocytes or presence of dysplasia after neonatal treatment of rats with LNPF, extract of cotton-pellet granuloma or pertussis vaccine, associated with reduction of adult ability to develop cotton-pellet granuloma . 335
TRACHEA, obstruction with oesophageal atresia 261
TRANSPLANTATION of kidney, two cases of tertiary hyperparathyroidism after and one while awaiting; distinct adenoma in one only 23
TRAUMA important in pathogenesis of dissecting aneurysms of arteries other than aorta 219
TRIPROLIDINE potent inhibitor of histamine and histamine-releasing agents 48/80 and polymyxin B, and of bradykinin; mild effect on globulin PF; in vascular permeability tests 1
TUMOURS, ANIMAL, adenomas and adenocarcinomas induced in mouse lung *in vitro* with 20-methylcholanthrene, development and nature of lamellar cytoplasmic inclusions in . . . 211
ameloblastic odontome of mandible in 4-yr-old cow 169
papillary cystic adenomas and solid cortical adenomas of rat kidney produced in some rats given six daily doses of dimethylnitrosamine by mouth; abortive brush-border formation in some solid cortical adenomas . . 187
renal mesenchymal tumours induced in rats by oral administration of dimethylnitrosamine arise from multipotential interstitial stem-cells giving rise first to peritubular proliferation of spindle cells, later differentiated into fibroblasts and smooth-muscle cells . . 181
thymoma with myasthenia gravis in a dog (Boxer cross Labrador) . . . 177
TUMOURS, HUMAN, adenoma of parathyroid in case of tertiary hyperparathyroidism awaiting renal transplant for nephrotic syndrome 23
basal-cell carcinoma, digestion of cellular fragments in phagolysosomes in cells of 55
early carcinomas in endometrial polyps, incidence and significance . . 47
microscopic testicular teratoma (1 mm diameter) with chorionepitheliomatous metastases 91
multiple cutaneous meningiomas associated with ovarian fibroma in a 3-yr-old Nigerian girl; possible histogenetic relationship of tumours . . . 165
simple ameloblastoma, ultrastructure . 173

UTERUS, carcinoma in endometrial polyps, associated in all six cases with carcinoma of endometrium or cervix . . 47
carcinoma of cervix or endometrium probably always present when carcinoma develops in uterine polyp; tumours not related, probably due to common stimulus 47

VESSELS of developing chick embryo develop intima, media and adventitia by 11th day, but are not distinguishable into arteries and veins by then . . 281

WATER, cold- (25°C), treatment of burns effective to 45 min. after injury, reduces mortality and extent of necrosis; repair more rapidly established 137

INDEX OF AUTHORS

PAGE

ADKINS, K. F., and BINNINGTON, JILL A., ameloblastic odontosarcoma in a bovine mandible 169

ASHLEY, D. J. B., a case of congenital tracheal obstruction with oesophageal atresia 261

ASTRUP, T., and WÜNSCHMANN-HENDERSON, BARBARA, relation of fibrinolytic activity in human oral epithelial cells to cellular maturation: the influence of smoking 293

BABABUNMI, E. A., and BASSIR, O., liver function and histology in various species of animal treated with non-lethal doses of aflatoxin B_1 . . 85

BASSIR, O., and BABABUNMI, E. A., liver function and histology in various species of animal treated with non-lethal doses of aflatoxin B_1 . . 85

BERRY, C. L. and GERMAIN, JOCELYN, absence of the third molar tooth in the mouse: its relevance to human malformation 35

BERRY, C. L., LOOKER, T., and GERMAIN, JOCELYN, nucleic acid and scleroprotein content of the developing human aorta 265

BHUYAN, U. N., DEO, M. G., RAMALINGASWAMI, V., and NAYAK, N. C., fibroplasia in experimental protein deficiency: a study of fibroblastic growth and of collagen formation and resorption in the rat 191

BINNINGTON, JILL A., and ADKINS, K. F., ameloblastic odontosarcoma in a bovine mandible 169

BUSH, VALERIE, KÁDÁR, ANNA, and GARDNER, D. L., glycosaminoglycans in developing chick-embryo aorta revealed by ruthenium red: an electron-microscope study . . 275

CARR, JEAN, the effect of anti-inflammatory drugs on increased vascular permeability induced by chemical mediators . 1

CHOU, S. T., and GIBSON, J. B., a comparative histochemical study of rat livers in alpha - naphthyl - *iso* - thiocyanate (ANIT) and DL-ethionine intoxication 73

COOK, T. A., and YATES, P. O., a critical survey of techniques for arterial mensuration 119

PAGE

COOK, T. A., and YATES, P. O., a histometric study of cerebral and renal arteries in normotensives and chronic hypertensives 129

COOPER, E. H., COWEN, DIANA M., and KNOWLES, JUDY C., the recovery of mouse bladder epithelium after injury by 4 - ethylsulphonylnaphthalene - 1-sulphonamide 151

CORRIN, B., and VIJEYARATNAM, G. S., origin of the pulmonary alveolar macrophage studied in the iprindole-treated rat 115

CORRIN, B., and VIJEYARATNAM, G. S., pulmonary histiocytosis simulating desquamative interstitial pneumonia in rats receiving oral iprindole . . 105

COWEN, DIANA M., COOPER, E. H., and KNOWLES, JUDY C., the recovery of mouse bladder epithelium after injury by 4 - ethylsulphonylnaphthalene - 1-sulphonamide 151

DAVIES, D. J., IRETON, H. J. C., and MCGIVEN, A. R., renal mesenchymal tumours induced in rats by demethylnitrosamine: light- and electron-microscope studies 181

DEMPSEY, A. N., LINDARS, D. C., ROOKE, G. B., and WARD, F. G., pneumoconiosis and death from coronary heart disease 249

DEO, M. G., BHUYAN, U. N., RAMALINGASWAMI, V., and NAYAK, N. C., fibroplasia in experimental protein deficiency: a study of fibroblastic growth and of collagen formation and resorption in the rat. 191

DONALD, K. J., an electron-microscope study of defibrination during carbon clearance in rabbits stimulated by a tubercle bacillary lipid . . . 329

DONALD, K. J., the mechanism of enhanced clearance of colloidal carbon from the blood of rabbits stimulated with a tubercle bacillary lipid . . . 97

DONALD, K. J., and POUND, A. W., the mechanism of the adjuvant effect of a tubercle bacillary lipid on the antibody response of rabbits to sheep erythrocytes 59

PAGE

DUNN, C., GIROUD, J. P., PAPADIMITRIOU, J. M., and WILLOUGHBY, D. A., thymic anomalies in the rat after various neonatal treatments 335

EL-LABBAN, N. G., LEE, K. W., and KRAMER, I. R. H., ultrastructure of a simple ameloblastoma 173
EL-MAGHRABY, M. A. H. A., and GARDNER, D. L., development of connective-tissue components of small arteries in the chick embryo 281

FERNANDEZ, HENDRIKA, MERSEREAU, W. A., and MOORE, S., renal renin in experimental nephrosclerosis 319
FINCHAM, W. J., TAYLOR, A. G., and LACK, C. H., synovitis produced by intra-articular injections of a non-haemolytic fraction of streprolysin-S preparations 199
FLAKS, ANTONIA, and FLAKS, B., electron-microscope observations on the formation of the cytoplasmic lamellar inclusion bodies in murine pulmonary tumours induced *in vitro* 211
FLAKS, B., and FLAKS, ANTONIA, electron-microscope observations on the formation of the cytoplasmic lamellar inclusion bodies in murine pulmonary tumours induced *in vitro* 211
FOX, H., ultrastructure of the human gall-bladder epithelium in cholelithiasis and chronic cholecystitis 157

GARDNER, D. L., and EL-MAGHRABY, M. A. H. A., development of connective-tissue components of small arteries in the chick embryo . . 281
GARDNER, D. L., KÁDÁR, ANNA, and BUSH, VALERIE, glycosaminoglycans in developing chick-embryo aorta revealed by ruthenium red: an electron-microscope study 275
GERMAIN, JOCELYN, and BERRY, C. L., absence of the third molar tooth in the mouse: its relevance to human malformation 35
GERMAIN, JOCELYN, BERRY, C. L., and LOOKER, T., nucleic acid and scleroprotein content of the developing human aorta 265
GIBSON, J. B., and CHOU, S. T., a comparative histochemical study of rat liver in alpha- naphthyl - *iso* - thiocyanate (ANIT) and DL-ethionine intoxication 73
GIROUD, J. P., PAPADIMITRIOU, J. M., DUNN, C., and WILLOUGHBY, D. A., thymic anomalies in the rat after various neonatal treatments . . 335
GRIMELIUS, L., JOHANSSON, H., LINDQUIST, B., and WIBELL, L., tertiary hyperparathyroidism occurring during a renal transplantation programme: report and discussion of three cases . 23
GUTHRIE, W., and MACLEAN, H., dissecting aneurysms of arteries other than the aorta 219

HABESHAW, J. A., a serum-protein-free medium for the culture of macrophages and related cells 95
HALEEM, M. A., and HARRIMAN, D. G. F., centronuclear myopathy in old age . 237
HALL, G. A., HOWELL, J. MCC., and LEWIS, D. G., thymoma with myasthenia gravis in a dog 177
HARRIMAN, D. G. F., and HALEEM, M. A., centronuclear myopathy in old age . 237
HAYASHI, T., and STEMMERMANN, O. N., lipid pneumonia in the Hawaiian feral mongoose 205
HOWELL, J. MCC., HALL, G. A., and LEWIS, D. G., thymoma with myasthenia gravis in a dog 177
HUXLEY, MARIANNE, and TAPP, E., the histological appearance of the human pineal gland from puberty to old age 137

IRETON, H. J. C., and MCGIVEN, A. R., renal epithelial dysplasia and neoplasia in rats given dimethylnitrosamine . 187
IRETON, H. J. C., MCGIVEN, A. R., and DAVIES, D. J., renal mesenchymal tumours induced in rats by dimethylnitrosamine: light- and electron-microscope studies 181

JOHANSSON, H., GRIMELIUS, L., LINDQUIST, B., and WIBELL, L., tertiary hyperparathyroidism occurring during a renal transplantation programme: report and discussion of three cases . 23
JUNAID, T. A., NKPOSONG, E. O., and KOLAWOLE, T. M., cutaneous meningiomas and an ovarian fibroma in a 3-yr-old girl 165

KÁDÁR, ANNA, GARDNER, D. L., and BUSH, VALERIE, glycosaminoglycans in developing chick-embryo aorta revealed by ruthenium red: an electron-microscope study 275
KERR, J. F. R., and SEARLE, J., the digestion of cellular fragments within phagolysosomes in carcinoma cells . . . 55

PAGE

KNOWLES, JUDY C., COOPER, E. H., and COWEN, DIANA M., the recovery of mouse bladder epithelium after injury by 4 - ethylsulphonylnaphthalene - 1-sulphonamide 151
KOLAWOLE, T. M., JUNAID, T. A., and NKPOSONG, E. O., cutaneous meningiomas and an ovarian fibroma in a 3-yr-old girl 165
KRAMER, I. R. H., LEE, K. W., and EL-LABBAN, N. G., ultrastructure of a simple ameloblastoma 173

LACK, C. H., TAYLOR, A. G., and FINCHAM, W. J., synovitis produced by intra-articular injections of a non-haemolytic fraction of streptolysin-S preparations 199
LEE, K.W., EL-LABBAN, N. G., and KRAMER, I. R. H., ultrastructure of a simple ameloblastoma 173
LEWIS, D. G., HALL, G. A., and HOWELL, J. McC., thymoma with myasthenia gravis in a dog 177
LINDARS, D. C., ROOKE, G. B., DEMPSEY, A. N., and WARD, F. G., pneumoconiosis and death from coronary heart disease 249
LINDQUIST, B., GRIMELIUS, L., JOHANSSON, H., and WIBELL, L., tertiary hyperparathyroidism occurring during a renal transplantation programme: report and discussion of three cases . . 23
LOOKER, T., BERRY, C. L., and GERMAIN, JOCELYN, nucleic acid and scleroprotein content of the developing human aorta 265

MCDOWELL, ELIZABETH M., light- and electron-microscope studies of the rat kidney after administration of inhibitors of the citric acid cycle *in vivo*: changes in the proximal convoluted tubule during fluorocitrate poisoning 303
MCGIVEN, A. R., and IRETON, H. J. C., renal epithelial dysplasia and neoplasia in rats given dimethylnitrosamine . 187
MCGIVEN, A. R., IRETON, H. J. C., and DAVIES, D. J., renal mesenchymal tumours induced in rats by dimethylnitrosamine: light- and electron-microscope studies 181
MACLEAN, H., and GUTHRIE, W., dissecting aneurysms of arteries other than the aorta 219
MERSEREAU, W. A., MOORE, S., and FERNANDEZ, HENDRIKA, renal renin in experimental nephrosclerosis . . 319
MITCHELL, R., ÓFEIGSSON, Ó. J., and PATRICK, R. S., observations on the cold water treatment of cutaneous burns 145
MOORE, S., MERSEREAU, W. A., and FERNANDEZ, HENDRIKA, renal renin in experimental nephrosclerosis . . 319

NAYAK, N. C., BHUYAN, U. N., DEO, M. G., and RAMALINGASWAMI, V., fibroplasia in experimental protein deficiency: a study of fibroblastic growth and of collagen formation and resorption in the rat 191
NKPOSONG, E. O., JUNAID, T. A., and KOLAWOLE, T. M., cutaneous meningiomas and an ovarian fibroma in a 3-yr-old girl 165

ÓFEIGSSON, Ó. J., MITCHELL, R., and PATRICK, R. S., observations on the cold water treatment of cutaneous burns 145

PAPADIMITRIOU, J. M., GIROUD, J. P., DUNN, C., and WILLOUGHBY, D. A., thymic anomalies in the rat after various neonatal treatments . . 335
PATRICK, R. S., ÓFEIGSSON, Ó. J., and MITCHELL, R., observations on the cold water treatment of cutaneous burns 145
POUND, A. W., and DONALD, K. J., the mechanism of the adjuvant effect of a tubercle bacillary lipid on the antibody response of rabbits to sheep erythrocytes 59

RAMALINGASWAMI, V., BHUYAN, U. N., DEO, M. G., and NAYAK, N. C., fibroplasia in experimental protein deficiency: a study of fibroblastic growth and of collagen formation and resorption in the rat. 191
ROOKE, G. B., LINDARS, D. C., DEMPSEY, A. N., and WARD, F. G., pneumoconiosis and death from coronary heart disease 249
ROTHWELL, T. L. W., and SPECTOR, W. G., the effect of neonatal and adult thymectomy on the inflammatory response 15

SALM, R., microscopic testicular teratoma with chorionepitheliomatous metastases 91
SALM, R., the incidence and significance of early carcinomas in endometrial polyps 47
SEARLE, J., and KERR, J. F. R., the digestion of cellular fragments within phagolysosomes in carcinoma cells . . 55

PAGE

SPECTOR, W. G., and ROTHWELL, T. L. W., the effect of neonatal and adult thymectomy on the inflammatory response 15

STEMMERMANN, G. N., and HAYASHI, T., lipid pneumonia in the Hawaiian feral mongoose 205

TAPP, E., and HUXLEY, MARIANNE, the histological appearance of the human pineal gland from puberty to old age 137

TAYLOR, A. G., LACK, C. H., and FINCHAM, W. J., synovitis produced by intra-articular injections of a non-haemolytic fraction of streptolysin-S preparations 199

VIJEYARATNAM, G. S., and CORRIN, B., origin of the pulmonary alveolar macrophage studied in the iprindole-treated rat 115

VIJEYARATNAM, G. S., and CORRIN, B., pulmonary histiocytosis simulating desquamative interstitial pneumonia in rats receiving oral iprindole . . 105

PAGE

WARD, F. G., LINDARS, D. C., ROOKE, G. B., and DEMPSEY, A. N., pneumoconiosis and death from coronary heart disease 249

WIBELL, L., GRIMELIUS, L., JOHANSSON, H., and LINDQUIST, B., tertiary hyperparathyroidism occurring during a renal transplantation programme: report and discussion of three cases . . 23

WILLOUGHBY, D. A., GIROUD, J. P., PAPADIMITRIOU, J. M., and DUNN, C., thymic anomalies in the rat after various neonatal treatments . . 335

WÜNSCHMANN-HENDERSON, BARBARA, and ASTRUP, T., relation of fibrinolytic activity in human oral epithelial cells to cellular maturation: the influence of smoking 293

YATES, P. O., and COOK, T. A., a critical survey of techniques for arterial mensuration 119

YATES, P. O., and COOK, T. A., a histometric study of cerebral and renal arteries in normotensives and chronic hypertensives 129